BARNES, RICHARDSON & COLBURN

ATTORNEYS & COUNSELLORS AT LAW

1225 EYE STREET, N.W.

SUITE 1150

WASHINGTON, D.C. 20005

TELEPHONE: (202) 457-0300

FACSIMILE: (202) 331-8746

E-MAIL: barnes@brc-dc.com

http://www.barnesrichardson.com

475 PARK AVENUE SOUTH
NEW YORK, N.Y. 10016
TEL. (212) 725-0200
FACSIMILE (212) 889-4135

303 EAST WACKER DRIVE
SUITE 1100
CHICAGO, ILLINOIS 60601
TEL. (312) 565-2000
FACSIMILE (312) 565-1782

RUFUS E. JARMAN, JR.
JAMES S. O'KELLY
ROBERT E. BURKE
DONALD J. UNGER
MATTHEW T. McGRATH
SANDRA LISS FRIEDMAN*
BRIAN F. WALSH*
KAZUMUNE V. KANO*
F.D. VAN ARNAM, JR.*
LAWRENCE M. FRIEDMAN*
ALAN GOGGINS
ROBERT A. SHAPIRO

CAROLYN D. AMADON*
STEPHEN W. BROPHY
MICHAEL J CHESSLER
TSIONA COHEN*
JAMES B. DORAN*
DAVID G. FORGUE*
YVONNE M. HILST
BEATA KOLOSA*
KEVIN W. LEONARD*
SHANNON N. RICKARD*
WM. RANDOLPH RUCKER*
JOSEPH M. SPRAGAGEN*
JANE E. WELSH*
JOHN ZINCANI*

SPECIAL COUNSEL
ANSIS M. HELMANIS*

OF COUNSEL
DAVID O. ELLIOTT
GUNTER von CONRAD

KARIN M. BURKE*
ROBERT F. SEELY

INTERNATIONAL TRADE ANALYSTS
TRACI L. GREVER
AMY H. WARLICK

*NOT ADMITTED IN D.C.

January 18, 2002

Ms. Gloria Blue
Executive Secretary
Trade Policy Staff Committee
Office of the United States Trade Representative.
600 17th Street, N.W.
Washington, D.C. 20508

Re: Exclusion Requests in Connection with Inv. No. TA-201-73 (Certain Steel Products)

Dear Madam Secretary:

In accordance with the instructions of Mr. Andrew Stephens, we are hereby providing additional public specifications and descriptions for the exclusion requests previously filed with the Office of the United States Trade Representative on behalf of the Association of Specialty Cold Rolled Strip Producers of Germany, Austria, and Sweden ("SAGA").

In the interest of enabling interested parties to address these requests more fully, we ask that this document be posted to the USTR website. In accordance with Mr. Stephens instructions, a copy of this filing is also being provided to the Department of Commerce and to those domestic producers we believe to be interested.

Please contact us should you have any questions.

Respectfully submitted,
BARNES, RICHARDSON & COLBURN

By: Matthew T. McGrath
Matthew T. McGrath
Counsel to the Association of Specialty Cold Rolled Strip Producers of Germany, Austria, and Sweden

1. Special Precision Strip Steel for Doctor Blades for Coating of Paper or for use in the Printing Industry

HTSUS 7211.90.00.00

Special precision strip for the coating of paper and for use in the printing industry. The material is only used for the manufacturing of coater and printing doctor blades used in the paper and printing industry. To SAGA's knowledge, there are only a few producers manufacturing the pre-material. A coated high carbon strip steel according to the alloy composition UHB20C, QRO-90 and QRO-WT. The end product must have tight flatness tolerances, a uniform grain structure and an exact hardness of the strip material used. The manufacture of this product requires cold rolling mills specially designed to produce a narrow strip below 500 mm width. Heat treatment equipment and practice is also specifically adapted to produce strip steel with an unbeaten flatness, a uniform grain structure and exact hardness. The strip is further processed by special edging machinery, sharpening and grinding of the edges. Chemical composition: UHB20C: C content 0,95 – 1,05 % by weight, Si content 0,20 – 0,35 % by weight, Mn content 0,35 – 0,50 % by weight, P content max 0,015 % by weight, S content max 0,010 % by weight, Cr content: - , Ni content: -, Coating DrBlades:
Material width: Max 100 mm, Material thickness: 0,25 – 1,64 mm, Typical straightness deviations: max 0,3 mm per 3000mm, Printing Dr Blades: Material width: max 100mm, Material thickness: 0.06 – 0.25 mm, Standard width tolerances: 0.07 mm for material less than 20 mm wide, 0,10 mm for 20-50 mm and 0.15 mm for above 50 mm, Tensile strength: 1960 N/mm2 (580HV), hardened and tempered, Straightness deviaton: 0.6 mm/3000mm.

2. Cold rolled and hardened and tempered strip steel for coater blades

HTSUS 7211.29.20.90 and 7211.29.60.80

The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements. Chemical Composition (in percent): Carbon 0.98 – 1.05; Silicon 0.15-0.30; Manganese 0.4-0.6; Sulpher less than 0.005; Phosphorous less than 0.02; Aluminum less than 0.02; Chromium 0.15-0.4' Copper less than 0.15; Nickel less than 0.15; hardness HRC 48-54; Width: ½ thru 4 inches; thickness 0.015 thru 0.02 inches; edges: square filed. See also numbers 1, 3 and 4.

3. Coater Blade Steel

HTSUS 7226.99.00

The product is used for industrial knives used in paper coating. The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill the requirements on straightness and edge finish. To SAGA's knowledge, this product is not made in the United States. See also number 1 above. Cold-rolled hardened and tempered strip steel: grades Eberle 18, Eberle 18C SAE 1095 modified alloyed steel. Width maximum 6 inches, thicknessL 0.01 - 0.035 inches, bright polished, unpolished or blue polished surface, surface roughness Rmax 3.0 micrometer, high precision straightness and flatness, tensile strength UTS 246 ksi, edges deburred or machined.

4. Doctor Blade Steel for rotogravure and offset printing

HTSUS 7226.99.00

This product is used in the production of industrial knives for rotgravure and offset printing (this product, but with a surface plated with nickel phosphorus is already excluded from this investigation). The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill the requirements on heat treatment, straightness and edge finish. See also number 1 above. Cold rolled hardened and tempered grades: Eberle 18ER, 18ER-C (SAE 1095 modified alloyed steel); thickness range 0.004 - 0.010 inches, width maximum 6 inches; tensile strength UTS 282-304 ksi, high precision straightness max. deviation 0.24 in/10ft, flatness max. deviation 0.3 percent of the width, edges rounded.

5. Cold rolled and hardened and tempered strip steel for shock absorber plates

HTSUS 7211.29.20.90 and 7211.29.60.80

The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements. To SAGA's knowledge, there is no U.S. producer of this product. Chemical Composition (in percent): Carbon 0.98 – 1.05; silicon 0.15-0.30; manganese 0.4 - 0.6; sulpher less than 0.005; phosphorus less than 0.02; aluminum less than 0.02; chromium 0.15-0.4; copper less than 0.15; nickel less than 0.15; hardness: HRC 50 – 58; width from ½ thru 20 inches; thickness: from 0.003 thru 0.04 inches; surface roughness: RMS less than 15. See also numbers 6 and 15.

6. Shock Absorber Valve Steel for the automotive industry

HTSUS 7211.90.00.

This product is made for the end use specified and has no applications outside that use. Special developed machinery and devices are used to fulfill the requirements on hardening parameters and surface finish. See also number 5 above. Cold rolled hardened and tempered strip steel; grades Eberle 18, 18C (SAE 1095 modified alloyed steel); Eberele 13, 13C (SAE 1070/1075 modified alloyed steel). Width maximum 10 inches, thickness maximum 0.004 - 0.04 inches, tensile strength UTS 246 - 304 ksi, high precision flatness - maximum deviations 0.3 percent of the width, bright polished surface, surface roughness Ra maximum 0.25 micrometer, edges deburred.

7. Product 1095 ra greater than or equal to 8, width 24.5".

HTSUS 7225.50.80.

The product is a cold rolled strip for hardening with special low roughness (bright finish) in hard rolled condition and wide widths. To SAGA's knowledge, there is no U.S. production in these widths nor are there any substitute products. Production requires a wide strip mill, provided by special rolling technology and special grinded work rolls. The products will be finished (hardened in the United States and are used in the manufacture of shock absorbers. The thickness to be delivered in these wide widths are 0.2 to 3.0 mm (.008 - 0.12 inches). See also number 5 above.

8. Wood Band Saw Steel

HTSUS 7226.99.00.00.

This product is used for manufacturing band saws for wood cutting. Band saws require a high flatness, uniform grain structure and an exact harness of the strip material used. It should be noted that some band saw steel is already excluded from this investigation. However, the definition used is under-inclusive. A high carbon strip steel according to the alloy composition UHB15, UHB 15LM (C75) and UHB 15N20; also alloy composition (C75) and 75Ni8.. The manufacturing process requires special equipment and specific expertise different from the equipment used to produce commodity cold rolled strip steel. The manufacture of this product requires cold rolling mills specially designed to produce a narrow strip below 500 mm width. Heat treatment equipment and practice is also specifically adapted to produce strip steel with an unbeaten flatness, a uniform grain structure and exact hardness.
Thickness: less than or equal 1,1 mm. Width: less than 400mm Chemical composition: Carbon:0,73 – 0,78 weight-% Silicon:0,20 – 0,30 weight-% Manganese:0,60 – 0,70 weight-% Phosphorus: max. 0,015 weight-% Sulfur: max. 0,010 weight-% Chromium:0,05 – 0,20 weight-% Copper: max. 0,20 weight-% Aluminum: 0,02 – 0,04 weight-% Microstructure: tempered Martensite with Bainite, no surface decarburization Mech. Properties: Hardness: 446 +12/-23 HV respectively 45 +1/-2 HRC Surface finish: bright, polished. Edges: treated edges. Cross Bow: max. 0,1mm per mm width;
Nickel-alloyed Band Saw Steel, which meets the following characteristics: Thickness: above 1,1 mm, less than or equal 3,00mm Width: less than 400mm
Chemical composition: Carbon: 0,70 – 0,80 weight-% Silicon: 0,20 – 0,35 weight-% Manganese: 0,30 – 0,45 weight-% Phosphorus: max. 0,020 weight-% Sulfur: max. 0,006 weight-% Chromium: 0,05 – 0,20 weight-% Nickel: 1,90 – 2,10 weight-% Copper: max. 0,15 weight-%
Aluminum: 0,02 – 0,04 weight-% Microstructure: tempered Martensite with Bainite, no surface decarburization Mech. Properties: Hardness: 446 +12/-23 HV respectively 45 +1/-2 HRC
Surface finish: bright, polished. Edges: treated edges. Cross Bow: max. 0,1mm per mm width
AND
Chemical composition: UHB15: C content 0,67 – 0,76 % by weight; Si content 0,20 – 0,35 % by weight; Mn content 0,40 – 0,55 % by weight; P content max 0,020 % by weight; S content max 0,010 % by weight; Cr content: - ; Ni content: - ; UHB15LM: C content 0,70 – 0,80 % by weight;
Si content 0,15 – 0,30 % by weight ; Mn content 0,65 – 0,80 % by weight; P content max 0,020 % by weight; S content max 0,020 % by weight; Cr content:- ; Ni content: - ; UHB15N20: C content 0,70 – 0,80 % by weight; Si content 0,20 – 0,35 % by weight; Mn content 0,30 – 0,45 % by weight
P content max 0,020 % by weight; S content max 0,016 % by weight; Ni content 1,90 – 2,10 % by weight; Cr content –. Typical material properties: Hardened and tempered. Tensile Strength 1450 N/mm2 for thicknesses less than 2 mm and 1370 N/mm2 for

thicknesses over 2 mm. Width Tolerance B1= +- 0.35mm, thickness tolerance T1(+-0,039mm), flatness P4 (max deviation 0.1% of width of strip), straightness +-0,25mm/1000mm). Dimensions: Widths 6,3 to 412,8 mm. Thickness 0,40 to 3,05mm.

9. Cold rolled and hardened and tempered strip steel for band saws

HTSUS 7226.92.50.00 and 7226.92.70.50

The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements. For this reason, production and availability of this material is very limited in the United States. Chemical Composition (in percent): Carbon 0.70 – 0.75; silicon 0.15-0.30; manganese 0.3 – 0.5; sulpher less than 0.01; phosphorus less than 0.02; aluminum less than 0.018; chromium 0.1 – 0.4; copper less than 0.15; nickel 1.8 – 2; hardness HRC 40-44; width from ½ thru 20 inches; thickness from 0.015 thru 0.12 inches; edges square or round AND Carbon 0.70 – 0.75; silicon 0.15-0.30; manganese 0.3 – 0.5; sulpher less than 0.01; phosphorus less than 0.02; aluminum less than 0.018; chromium 0.1 – 0.4; copper less than 0.15; nickel 2.3 – 2.6; hardness HRC 40-44; width from ½ thru 20 inches; thickness from 0.015 thru 0.12 inches; edges square or roundSee also number 8 above.

10. Cold rolled and hardened and tempered strip steel for chain saws

The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements.

11. Cold rolled and hardened and tempered strip steel for circular saws

HTSUS 7226.92.50.00 and 7226.92.70.50

The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements. For this reason, production and availability of this material is very limited in the United States. Chemical Composition (in percent): Carbon 0.70 – 0.80; silicon 0.25 – 0.50; manganese 0.6-0.8; sulpher less than 0.03; phosphorus less than 0.03; aluminum less than 0.01; chromium 0.3-0.4; copper less than 0.15; nickel less than 0.15; hardness: HRC 40-46; thickness from 0.03 thru 0.15 inches; width: from 3.5 thru 20 inches; surface: bright.

12. Product C 125 pin point

HTSUS 7226.92.50.

This product is used in the production of various types of saws, especially technical optimizing for hardening of saw tooths. SAGA is aware of some German producers of this product, but to SAGA's knowledge, there is no U.S. production. The product is a cold rolled steel strip, carbon content approximately 1.25 percent with a pin point carbide structure that means a very high number of carbide in the material structure. The dimensions are thickness 0.6 - 0.9 mm = .024 - .036 mm; width 200-400 mm = 8 - 16 inches. Production requires special melting companies for this grade with special hot rolling technology as precondition for obtaining the special structure, as well as additional cold rolling technology to finalize the pin point structure. Unlike numbers 8 and 9 above, this product is not hardened and tempered, but only cold rolled. Please see also numbers 8 and 9 above.

13. Cold rolled and hardened and tempered strip steel for die rules and cutting rules

HTSUS 7211.29.20.90

The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements. For this reason, production and availability of this material is very limited in the United States. Grades SAE 1045, 1048, 1055, 1060, 1074; hardness: HRC 42-60; thickness: from 0.015 thru 0.06 inches; width from ½ thru 4 inches; surface bright polished, blue polished, bright; edges square or round; structure: marensite or bainite with a special layer of decarburization of 0.0003 inches – 0.0012 inches per side. See also numbers 18 and 19.

14. Open coil annealed strip (OCA) 1050/1065/1075 - steel rules and die steel

HTSUS 7225.50.80, 7209.16.00, 7209.17.00.

This product is a specialized cold rolled strip with no common name used after hardening in the U.S. by the paper and textile industry for steel rules and die steel. The product is a cold-rolled strip in heat-treatable steel grades AISI 1050/1065/1075 with decarburized surface. The product requires special annealing for low carbon surface for AISI grades 1050, 1065, and 1075. Production of this product requires open coil batch annealing facilities and special annealing systems for decarburizing. Surface-decarburized C-steel, C-content 0.30 - 0.80 percent and Cr 0-0.50 percent. Decarburization of hot and cold rolled steel; thickness range 0.50 - 3.00 mm (0.020 - .120); strip widths: 300-800 mm (12-31 inches); decarburization in an open coil batch annealing line; defined, adjusted decarburization depths of 10 - 300 um with adjusted C-carbon transition gradient. Unlike numbers 13, 14, 18 and 19, this product is not hardened but requires another unique open coil process annealing. Please see also numbers 13, 18 and 19.

15. Valve Steel

HTSUS 7211.90.00.00.

This produce is used in the manufacturing of compressor valves (air conditioning) and the valves in shock absorbers for the automobile industry. A high carbon (or stainless) strip steel according to the alloy composition UHB 20C, UHB 17Va or UHB 15N20. This product requires high flatness tolerances, a uniform grain structure and an exact hardness of the strip material used. The manufacture of this product requires cold rolling mills specially designed to produce a narrow strip below 500 mm width. Heat treatment equipment and practice is also specifically adapted to produce strip steel with an unbeaten flatness, a uniform grain structure and exact hardness. Chemical composition: UHB20C: C content 0,95 – 1,05 % by weight; Si content 0,20 – 0,35 % by weight; Mn content 0,35 – 0,50 % by weight

P content max 0,015 % by weight; S content max 0,010 % by weight; Cr content: - ;Ni content: -

UHB15N20: C content 0,70 – 0,80 % by weight; Si content 0,20 – 0,35 % by weight; Mn content 0,30 – 0,45 % by weight; P content max 0,020 % by weight; S content max 0,016 % by weight

Ni content 1,90 – 2,10 % by weight; Cr content – . UHB 17Va: C content 0,81 – 0,89 % by weight

Si content 0,20 – 0,35 % by weight; Mn content 0,45 – 0,65 % by weight; P content max 0,020 % by weight; S content max 0,015 % by weight; Ni content - ; Cr content – ;V content 0,15 – 1,25 % by weight. Typical size range: Thickness 0,15 – 1,0 mm; Width: 10,0 – 140 mm

16. Flapper Valve Steel

HTSUS 7226.99.00.

SAGA believes that this product is already excluded from the investigation. The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill the necessary requirements for cleanliness and surface finish. The product is a High Carbon Precision Steel Eberle grades 18, 18C (SAE 1095 modified alloyed steel); Eberle 13, 13C (SAE 1070/1075 modified alloyed steel). Thickness: less than or equal to 1.0 mm; width: less than or equal to 152.4 mm; chemical composition: carbon content greater than or equal to 0.90 percent and less than or equal to 1.05 percent by weight; silicon content greater than or equal to 0.15 percent and less than or equal to 0.35 percent by weight; manganese content greater than or equal to 0.30 percent and less than or equal to 0.50 percent by weight; phosphorus content of less than or equal to 0.03 percent, by weight; and sulpher content less than or equal to 0.0006 percent by weight; mechanical properties: tensile strength UTS greater than or equal to 162 KgF/square mm; hardness greater than or equal to 475 Vickers hardness; physical properties: flatness less than 0.2 percent of the normal strip width; microstructure: completely free from decarburization. Carbides are spheroidal and fine within 1 percent to 4 percent (area percentage) and are undissolved in the uniform tempered martensite; non-metallic inclusions; sulfide inclusions with area percentage less than or equal to 0.04 percent; and oxide inclusions with area percentage less than or equal to 0.05 percent; compressive stress: 10 to 40 KgF/square mm; surface roughness specifications: if thickness is less than or equal to 0.209mm, will have roughness (Rz) less than or equal to 0.5 micrometer; if thickness is greater than 0.209 mm but less than or equal to 0.310mm, will have roughness (Rz) of less than or equal to 0.6 micrometer; if thickness is greater than 0.310 mm but less than or equal to 0.440mm, will have roughness (Rz) less than or equal to 0.7 micrometer; if thickness is greater than 0.440 mm but less than or equal to 0.560 mm, will have roughness (Rz) less than or equal to 0.8 micrometer; if thickness is greater than 0.560 mm will have roughness (Rz) less than or equal to 1.0 micrometer.

17. Scalpel and Razor Blade Steel

This product is used in the manufacturing of razor blades and for the manufacturing of medical instruments. A stainless strip steel according to the alloy composition AEB-L. This product requires high flatness tolerances, a uniform grain structure and an exact hardness of the strip material used. The manufacture of this product requires cold rolling mills specially designed to produce a narrow strip below 500 mm width. Heat treatment equipment and practice is also specifically adapted to produce strip steel with an unbeaten flatness, a uniform grain structure and exact hardness.

18. Steel Rules

HTSUS 7217.10.90.00

Steel rules are uniquely used for the manufacture of cutting and creasing application in the packaging industry. Steel rules are manufactured from a high carbon strip steel according to the alloy composition 1060 and 1055. They are further processed by machining one edge like the edge of a knife, appropriate to be used for cutting applications in the packaging industry. The manufacture of this product requires cold rolling mills specially designed to produce a narrow strip below 500 mm width. Heat treatment equipment and practice is also specifically adapted to produce strip steel with an unbeaten flatness, a uniform grain structure and exact hardness. The strip is further processed by special edging machinery, sharpening and grinding of the cutting edge and an additional edge hardening. Range of dimension: Width 8.0 – 100.0 mm, Thickness 0.4 – 2.13 mm. Field of application: Steel rules are uniquely used for the manufacturing of cutting and creasing application in the packaging industry. Execution: There are different rules for different punching technologies; i. e. the flat bed and the rotary rules. The Böhler Ybbstal Band steel and creasing rules distinguish especially by the following characteristics, that are absolutely necessary for our customers (die makers): Material: Cutting rules and rotary rules: 1.1203. Creasing rules: 1.0060. Surface: gray - blue, free from rolling defects, laps, deep scratches, pits, etc.
Edge finish: Shaved and ground; there is a special edge finish for cutting rules named "Supreme"
(patented by Böhler Ybbstal Band). Straightness: Straightness tolerances max. 0.5 (0.25) mm/m; These tightest straightness tolerances are a must for material being used in automatic notching and bending machines Flatness: Closest flatness tolerances – please refer to straightness
Tolerances: Tightest tolerances (the height of the rules) are very important for the punching process (to reach a very high life time); Böhler Ybbstal Band has the advantage (is the only one) who has three tolerance classes (A, B and C) were we reach 1/3 of the height tolerances in comparison to the competition. Tolerances: Thickness: ± 0.015 mm (1,1 – 2 pt); ± 0.020 mm (3 – 4 pt). Height: 8.00 – 25.4 mm ± 0.020 mm (classified A, B and C) equals 0.007 mm; 25.4 – 50.8 mm ± 0.025 mm; 50.8 – 76.2 mm ± 0.030 mm; 76.2 – 100.0 mm ± 0.035 mm. Cross chamber: max. 0.001 mm/mm rule height. Straightness: max. 0.5 (0.25) mm/1000 mm rule length. Flatness: max. 5 mm/1000 mm rule length. Chemical composition : Cutting rules :carbon content of 0.53 to 0.57 percent by weight; silicon content of 0.10 to 0.35 percent by weight; manganese content of 0.60 to 0.75 percent by weight; phosphorus content of less than 0.02 percent by weight; sulfur content of less than 0.01 percent by weight; chromium content of 0.10 to 0.20 percent by weight; molybdenum content of less than 0.05 percent by weight; nickel content of less than 0.10 percent by weight; copper content of less than 0.10 percent by weight; aluminum content of 0.015 to 0.035 percent by weight. Creasing rules : carbon content of 0.35 to 0.45 percent by weight; silicon content of 0.10 to 0.45 percent by weight; manganese content of 0.50 to 0.85 percent by weight; phosphorus content of less than 0.04 percent by weight; sulfur content of less than 0.03 percent by weight; chromium content of 0.05

to 0.30 percent by weight; molybdenum content of less than 0.05 percent by weight; nickel content of less than 0.30 percent by weight; copper content of less than 0.30 percent by weight. Other properties : The Cutting rules shall have a fully bainitic structure with a specific decarburization zone on both strip surfaces of minimum 0.0004" to maximum 0.0016" and shall be bainitic hardened to either 335+/-15 HV or 400+/-20 HV or 450+/-20 HV or 525+/-25 HV respectively measured on cross sections thus securing proper bendability depending on strip thickness and hardness range. The cutting edge of cutting rules shall be machined or ground to specific cutting angle (mainly 30 - 60°) and - if necessary or demanded - high frequency or plasma hardened and tempered to high hardness (620+/-30 HV). The creasing rules shall have a fully bainitic structure without specific decarburization and shall be bainitic hardened to 370+/-20 HV thus securing sufficient stability for creasing process. To SAGA's knowledge, there is insufficient U.S. production of steel rules with U.S. producers unable to meet the needs of the market. SAGA estimates that U.S. producers can only serve 20-30 percent of the market..

19. Rule Die Steel

HTSUS 7217.10.90.00

The material is used for the manufacture of cutting tools for textile and leather (e.g. for car seats, shoes, etc.) A high carbon strip steel according to the alloy composition 1060 and 1055. The end product must have tight flatness tolerances, a uniform grain structure and an exact hardness of the strip material used. The manufacture of this product requires cold rolling mills specially designed to produce a narrow strip below 100 mm width. Heat treatment equipment and practice is also specifically adapted to produce strip steel with an unbeaten flatness, a uniform grain structure and exact hardness. The strip is further processed by a cold-profiling done by a special edging machinery, sharpening and grinding of the edges. The Böhler Ybbstal Band rule die steel distinguishes especially by the following characteristics, that are absolutely necessary for our customers (die makers): Material: 1.1203. Surface: grey-blue, free from rolling defects, laps, deep scratches, pits, etc. Edge finish: ground. Straightness: Straightness tolerances max. 1 mm/m; These tightest straightness tolerances are a must for being used in automatic processing bending machines (especially important in the near future) Flatness: Closest flatness tolerances – please refer to straightness. Chemical composition: Rule die steel :carbon content of 0.53 to 0.57 percent by weight; silicon content of 0.10 to 0.35 percent by weight; manganese content of 0.60 to 0.75 percent by weight; phosphorus content of less than 0.02 percent by weight; sulphur content of less than 0.01 percent by weight; chromium content of 0.10 to 0.20 percent by weight; molybdenum content of less than 0.05 percent by weight; nickel content of less than 0.10 percent by weight; copper content of less than 0.10 percent by weight; aluminum content of 0.015 to 0.035 percent by weight. Other properties : The rule die steel shall have a fully bainitic structure with a specific decarburization on both strip surfaces of minimum 0.0004" to maximum 0.0020" and shall be bainitic hardened to either 41-43+/-1 HRC or 37-39+/-1 HRC securing proper bendability depending on strip thickness and hardness range. The cutting edge of the rule die steel shall be ground to specific cutting angle (30 - 60°) and - if necessary or demanded - high frequency or plasma hardened and tempered to high hardness (510+/-30 HV). The rule die steel shall have a fully bainitic structure without specific decarburization and shall be bainitic hardened to 370+/-20 HV thus securing sufficient stability for creasing process.

20. Bi-Metal Strip

HTSUS 7226.92.80.50

The is a combination of two different steel grades. The material is used for the manufacturing of band saws, hand hack saws, hole saws and reciprocating saws for metal cutting. The product must have tight flatness tolerances, a uniform grain structure, an exact straightness, tight tolerances and a homogeneity of the strip used. The manufacturing process requires special equipment and specific expertise different from the equipment used to produce commodity cold rolled strip steel. One side is a high speed steel wire, according to the alloy composition M2, M42, M51, Matrix II and some powder metallurgical grades and on the other side there is a flexible spring steel grade according to the alloy composition D6A, 3 % CR-Beckon, 6135, 6150, etc. The wire and the spring steel is welded together to a homogeneous strip. The high speed steel wire is a rectangular, drawn wire with a sharp edge and an absolutely shiny surface. The dimension range is from 0.6 x 1 mm up to 1.6 x 4.76 mm. The process requires high energetic beam welding equipment specially designed for this purpose. Heat treatment equipment is also adapted to produce bi-metal strip steel with unbeaten flatness and straightness, a uniform grain structure on both materials, the high speed wire and the backing material and a welding seam without any inclusions or defects. Range of dimension: Width 4.76 – 125 mm, Thickness 0.50 – 2.65 mm. Field of application: Metal band saw blades, jig saw blades, reciprocating saw blades, hack saw blades, power saw blades, hole saw blades, knives, etc. Execution: in bi-metal resp. tri-metal. The Böhler Ybbstal Band bi-metal distinguishes especially by the following characteristics, that are absolutely necessary for the saw producer: Material for band saws: High speed steel (1.3299 or AISI MATRIX II; 1.3247 or AISI M42; 1.3207 or AISI M51). Backing material (1.2390; 1.2791 or AISI D 6 A). Material for jig and reciprocating saws: High speed steel (1.3343 or AISI M2; 1.3299 or AISI MATRIX II; 1.3247 or AISI M42). Backing material (1.2390; 1.2791 or AISI D 6 A). Material for hack saws: High speed steel (1.3343 or AISI M2; 1.3299 or AISI MATRIX II). Backing material (1.8159 or AISI 6150; 1.2791 or AISI D 6 A). Material for power and hole saws: High speed steel (1.3344 or AISI M3 CI. 2; 1.3299 or AISI MATRIX II). Backing material (1.2323; 1.2791 or AISI D 6 A). Surface: metallic bright, free from rolling defects, laps, deep scratches, pits, undercut, welding defects, etc. All this effects the life and the service life of the saw. Edge finish: High speed steel edge rectangular, smooth burr-free, with defined corner radius of max. 0.10 mm. Back edge machined rectangular with corner radius of 0.10 – 0.20 mm. Straightness: Tightest straightness tolerances that are a prerequisite for the processing of the saw. Flatness: Closest flatness tolerances that are absolutely necessary when using the saws, otherwise sawing at an angle. Tolerances: Tightest thickness, width and length tolerances that are essential for the processing of the saw. Those tolerances have a strong effect on the quality of the saw. Band saw tolerances: Width: W. 41.50 mm ± 0.050 mm. W > 41.50 mm ± 0.070 mm. Thickness: T. 0.63 mm ± 0.020 mm. T. 1.00 mm ± 0.025 mm. T. 1.50 mm ± 0.030 mm; T. 2.50 mm ± 0.035 mm. Flatness: max. 1 µm/mm strip width. Parallelism: max. deviation 0.020 mm at width of. 34.50 mm; max. deviation 0.030 mm at width of > 34.50 mm. Straightness: max. deviation 1.25 mm in 1000 mm. Twist: max. 5° per Meter. Hardness: High speed

steel 240 – 320 $HV_{3.}$ Weld seam max. 400 $HV_{3.}$ Backing material 180 – 250 $HV_{3.}$ Jig and reciprocating saw tolerances: Width: + 0.000 / -0.150 mm. Thickness: T. 1.00 mm ± 0.025 mm; T. 1.50 mm ± 0.030 mm; T. 2.50 mm ± 0.035 mm; Flatness: max. 1 µm/mm strip width; Parallelism: max. deviation 0.020 mm; Straightness: max. deviation 1.25 mm in 1000 mm; Twist: max. 5° per Meter; Hardness: High speed steel 240 – 320 $HV_{3;}$ Weld seam max. 410 $HV_{3;}$ Backing material 180 – 250 $HV_{3.}$ Chemical composition : M2 - High speed steel: carbon content of 0.83 to 0.87 percent by weight; silicon content of 0.20 to 0.40 percent by weight; manganese content of 0.20 to 0.40 percent by weight; phosphorus content of less than 0.03 percent by weight; sulphur content of less than 0.02 percent by weight; chromium content of 3.75 to 4.50 percent by weight; molybdenum content of 4.75 to 5.30 percent by weight; nickel content of less than 0.30 percent by weight; vanadium content of 1.75 to 2.10 percent by weight; tungsten content of 6.00 to 6.75 percent by weight; cobalt content of less than 0.50 percent by weight. Matrix II - HSS : carbon content of 0.70 to 0.80 percent by weight; silicon content of 0.15 to 0.40 percent by weight; manganese content of 0.15 to 0.40 percent by weight; phosphorus content of less than 0.03 percent by weight; sulphur content of less than 0.02 percent by weight; chromium content of 3.75 to 4.40 percent by weight; molybdenum content of 4.75 to 5.35 percent by weight; nickel content of less than 0.30 percent by weight; vanadium content of 0.90 to 1.20 percent by weight; tungsten content of 0.90 to 1.20 percent by weight; cobalt content of 7.50 to 8.50 percent by weight. M3Cl.1 - HSS : carbon content of 1.00 to 1.10 percent by weight; silicon content of 0.15 to 0.40 percent by weight; manganese content of 0.15 to 0.40 percent by weight; phosphorus content of less than 0.03 percent by weight; sulphur content of less than 0.02 percent by weight; chromium content of 3.75 to 4.40 percent by weight; molybdenum content of 5.75 to 6.25 percent by weight; nickel content of less than 0.30 percent by weight; vanadium content of 2.30 to 2.60 percent by weight; tungsten content of 6.00 to 6.50 percent by weight; cobalt content of less than 0.50 percent by weight.M3Cl.2 - HSS : carbon content of 1.17 to 1.25 percent by weight; silicon content of 0.15 to 0.40 percent by weight; manganese content of 0.15 to 0.40 percent by weight; phosphorus content of less than 0.03 percent by weight; sulphur content of less than 0.02 percent by weight; chromium content of 3.75 to 4.30 percent by weight; molybdenum content of 4.75 to 6.20 percent by weight; nickel content of less than 0.30 percent by weight; vanadium content of 2.70 to 3.20 percent by weight; tungsten content of 5.60 to 6.70 percent by weight; cobalt content of less than 0.50 percent by weight. M42 - HSS :carbon content of 1.05 to 1.12 percent by weight; silicon content of 0.15 to 0.40 percent by weight; manganese content of 0.15 to 0.35 percent by weight; phosphorus content of less than 0.03 percent by weight; sulphur content of less than 0.02 percent by weight; chromium content of 3.60 to 4.10 percent by weight; molybdenum content of 9.00 to 9.75 percent by weight; nickel content of less than 0.30 percent by weight; vanadium content of 1.00 to 1.30 percent by weight; tungsten content of 1.20 to 1.70 percent by weight; cobalt content of 7.50 to 8.50 percent by weight longitudinally continuously laser- or electron-beam-welded on a backing material consisting mainly of the following chemical composition: B552/W326 - backing :carbon content of 0.40 to 0.50 percent by weight; silicon content of 0.15 to 0.40 percent by weight; manganese content of 0.60 to 0.80 percent by weight; phosphorus content of less than 0.02 percent by weight; sulphur content of less than 0.01 percent by weight; chromium content of 0.90 to 1.50 percent by weight; molybdenum content of 0.70 to 1.10

percent by weight; nickel content of less than 0.60 percent by weight; vanadium content of 0.10 to 0.30 percent by weight. F550 - backing : carbon content of 0.47 to 0.55 percent by weight; silicon content of 0.15 to 0.40 percent by weight; manganese content of 0.70 to 0.90 percent by weight; phosphorus content of less than 0.02 percent by weight; sulphur content of less than 0.01 percent by weight; chromium content of 0.80 to 1.10 percent by weight; molybdenum content of less than 0.10 percent by weight; nickel content of less than 0.30 percent by weight; vanadium content of 0.10 to 0.20 percent by weight. B313 - backing : carbon content of 0.32 to 0.38 percent by weight; silicon content of 0.15 to 0.40 percent by weight; manganese content of 0.30 to 0.50 percent by weight; phosphorus content of less than 0.02 percent by weight;
sulphur content of less than 0.005 percent by weight; chromium content of 2.50 to 3.20 percent by weight; molybdenum content of 0.90 to 1.30 percent by weight; nickel content of less than 0.60 percent by weight; vanadium content of 0.15 to 0.40 percent by weight. Other properties : High speed steel having uniformly distributed fine to medium spheroidal alloy carbides with no evidence of decarburization or carburization and a hardness of 330 HV maximum. Backing material is annealed to spheroidal carbides in a ferritic matrix with no evidence of decarburization or carburization greater than 0.0004". Hardness shall be within 170 to 250 HV. The weld is annealed to maximum hardness of 410 HV without excessive amounts of hard areas and shall be free from weld cracks and voids. All material shall show no visible weld defects.

21. Bimetal Strip Steel for the manufacturing of different kinds of heavy duty saws and power saw tool components

HTSUS 7226.99.00.

The product is made for the end use specified and has no applications outside that use. This product is a combination of two different steel grades. Specially developed machinery and devices are used to fulfill requirements on precision welding, flatness, straightness and edge finish. See also number 20 above. One side is a high speed steel wire according to the alloy composition M2, M3-1, M42, M51, Matrix II and some powder metallurgical grades. On the other side there is a flexible spring steel grade according to the alloy composition D6A, 3% Cr-backing, 6135, 6150 X32CrMoV41, 4 percent Cr-Backing, etc. The wire and the spring steel are welded together to a homogeneous strip. The high speed steel wire is rectangular, drawn wire with a sharp edge and an absolutely shiny surface. The dimension range is from thcikness x width 0.02 - 0.063 x 0.04 - .19 inches. The bimetal size range of Eberle is: thickness range 0.020 - 0.0630 inches, width range 0.500 - 3.165 inches. Hardness of high speed steel wire 240 - 320 HV, weld max. 420 HV, backing 150 - 250 HV, high precision straightness 0.04 in/3ft and flatness max. deviation of 0.01 percent of the width, bright rolled surface finish, surface roughness Rmax 6 micrometers, edges of the high speed steel wire rectangular, backing material has rounded edges.

22. Bimetal Steel Strips for Textile Machine Parts

HTSUS 7226.99.00

The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill the requirements on precision welding, flatness, straightness and edge finish. Grades: Eberle 18, 18C (SAE 1095 modified alloyed steel), thickness range 0.004 - 0.020 inches, width range 0.500 - 4 inches. Tensile strength UTS 246-304 ksi, high precision straightness 0.04 inches/3ft and flatness maximum deviation 0.01 percent of width, bright polished surface Ra max 0.25 micrometer, edges rectangular.

23. **Texture Rolled Steel Strip (SORBITEX)**

HTSUS 7211.29.20.30 and 7211.29.45.00

SORBITEX is a special texture rolled steel strip. It is a high carbon spring steel with a special grain structure aligned in a certain pattern. The product is used to make retractor springs for various products, including seat belts and window blinds. This product is produced by Brockhaus in Germany. Thickness: 0.0039 - 0.0600 inches; Width: 0.1180 - 7.8700 inches; Chemical Composition: C = 0.76 - 0.96 percent, Si = 0.10 - 0.35 percent, Mn = 0.30 - 0.60 percent, P = less than 0.025 percent, S = less than 0.020 percent, Al = less than 0.060 percent, Cr = less than 0.30 percent, Ni = less than 0.20 percent, Cu = 0.20 percent; tensile strength 245,000 to 365,000 psi. The domestic industry states that the sole U.S. producer, Theis Precision Steel, the U.S. subsidiary of a German company, does not object to exclusion of this product.

SAGA is not aware of any domestic objection to this product.

24. Cold rolled strip steel for industrial blades

HTSUS 7226.92.70.50.

Chemical composition: Carbon 0.98-1.05 percent; Silicon 0.15-0.30 percent; Manganese 0.4-0.6 percent; Sulpher less than 0.005 percent; Phosphorus less than 0.2 percent; aluminum less than 0.01 percent; Chromium 0.15-0.4 percent; Copper less than 0.15 percent; Nickel less than 0.15 percent. Hardness: HV 280-320. Width from ½ inch through 1 inch. Thickness from 0.009 through 0.025 inches; thickness tolerance plus/minus 0.006 inches; edges deburred. The product is made for the end use specified and has no applications outside that use; This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements.

25. Cold rolled and hardened and tempered strip steel for springs

HTSUS 7211.29.20.90 and 7211.29.60.80

The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements. For this reason, production and availability of this material is very limited in the United States. SAE 1075 and 1095; hardness: HRC 42 – 60; thickness from 0.003 thru 0.12 inches; width from ½ thru 20 inches; surface bright polished, blue tempered, polished and blued; edges slit, square or round. See also number 36.

26. Cold rolled strip steel for trowels - hardened and tempered

HTSUS 7226.92.70.50

The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements. Chemical composition: Carbon 0.70-0.80 percent; Silicon 0.25-0.50 percent; Manganese 0.6-0.8 percent; Sulpher less than 0.03 percent; Phosphorus less than 0.03 percent; aluminum less than 0.01 percent; Chromium 0.3-0.4 percent; Copper less than 0.15 percent; Nickel less than 0.15 percent. Hardness: HRC 41-43. Width from .018 through .078 inches. Thickness from 3.5 through 8.125 inches; surface bright polished AND Carbon 0.98-1.05 percent; Silicon 0.15-0.30 percent; Manganese 0.4-0.6 percent; Sulpher less than 0.005 percent; Phosphorus less than 0.02 percent; aluminum less than 0.01 percent; Chromium 0.15-0.4 percent; Copper less than 0.15 percent; Nickel less than 0.15 percent. Hardness: HRC 75-78. Width from .018 through .078 inches. Thickness from 3.5 through 8.125 inches; surface leather polished

27. Cold rolled texture strip steel for retracting springs

HTSUS 7211.29.20.90 and 7211.29.60.80.

Chemical composition: Carbon 0.79 - 0.82 percent; Silicon 0.15 - 0.25 percent; Manganese 0.4 - 0.5 percent; Sulpher less than 0.003 percent, Phosphorus less than 0.02 percent; Aluminum 0.02 - 0.035 percent; Chromium 0.08 - 0.15 percent; Copper less than 0.12 percent; Nickel less than 0.10 percent. Tensile strength 276,000 - 348,000 PSI; Width from 0.3 inches through 12 inches. Thickness from 0.0045 inches through 0.011 inches; thickness tolerance plu/minus 0.0002 inches; edges deburred. The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements. For this reason, production and availability of this material is very limited in the United States. See also number 23.

SAGA is not aware of any domestic objection to this product.

28. Cold rolled strip steel for measuring tapes

HTSUS 7211.29.20.90, 7211.29.60.80, 7226.92.50.00 and 7226.92.70.50

Chemical composition: Carbon 0.98-1.05 percent; Silicon 0.15-0.30 percent; Manganese 0.4-0.6 percent; Sulpher less than 0.005 percent; Phosphorus less than 0.2 percent; aluminum less than 0.01 percent; Chromium 0.15-0.4 percent; Copper less than 0.15 percent; Nickel less than 0.15 percent. Tensile strength 145,000 - 160,000 PSI; Width from ½ inch through 20 inches. Thickness from 0.0045 through 0.0056 inches; thickness tolerance plus/minus 0.0003 inches; edges deburred. In addition, the same specifications in its hardened and tempered form: Hardeness: HV 580-650. The product is made for the end use specified and has no applications outside that use. This product requires sophisticated production techniques in the rolling and heat treating of cold-rolled steel. The product also requires very close tolerances in regard to thickness and width as well as exacting metallurgical requirements.

29. Certain Alloyed Clutch Spring Steel

HTSUS 7226.92.80.

This product is used by automotive subcontractors and clutch producers. Grade SAE 1074 alloyed; thickness: 0.35 mm – 1.40 mm; width 16-138 mm; hardened and tempered, tolerance range from .0004 inches to .0006 inches. This is a tailor-made material made to customer specifications and is not produced in the United States.

30. Certain Alloyed Clutch Spring Steel

HTSUS 7226.92.50 and 7226.92.80

This product is used by automotive subcontractors and clutch producers. German Grade 58 CR V4 and ZSTE 800; cold rolled annealed and skin passed. Thickness: 1.50mm to 3.70mm; Width: 150 – 538mm.Tolerances: 0.025 mm. This is a custom made material produced to customer specification and is not produced in the United States.

31. Ski Edge Profile

HTSUS 7228.60.80 and 7216.69.00

This product is used by the ski-and snowboard industry. Grade: SAE 1070 and German Grade X35Cr17; hardened and tempered, bright surface or primer coated, stamped condition.

32. High Carbon Deep Drawing Steel Alloyed

HTSUS 7211.29.60, 7226.92.50

This product is used in the stamping and tooling industry. This product must have special tolerances with regard to thickness, tensile strength and surface condition. All material is produced to customer specification. Grade: 1050 modified, 1070 and 1074 modified, 1095 modified; annealed and skin passed; thickness .010 – 0.125 inches; width: 12.375 – 20.000 inches. Special tolerances 1075 and 1095.

33. Finally Annealed Electrical Steel Strip

HTSUS 7225.19.00 and 7226.19.10

The product is used by the electrical motor industry. Coated with an insulating laquer modified according to customer's specification. The product has tailor-made insulation and a uniform microstructure which provides good stamping properties, low thickness deviation across the width leading to optimal stacking in the customer's process. Grade: Finally Finished Electrical Steel, Various Core Losses according to EN 10106; finally annealed and coated, slit to width end use. Thickness: 0.35 – 1.00 mm; Width: max 1250mm. There is only limited U.S. production of this product in the United States.

SAGA is not aware of any domestic objection to this product.

34. Certain Lapping Carrier Steel

HTSUS 7209.17.00, 7225.50.80, 7226.92.50

The product is used in the computer industry. Grade SAE 1075 modified and SAE 1095 modified (alloyed); hardened and tempered; thickness – 0.10 - .040 inches; Width: 12.000 – 24.000 inches. The product has extremely low thickness deviation across the width of the material (maximum 0.0004") in connection with a very high hardness and extremely low flatness values (0.001" per inch width). To SAGA's knowledge, there is no U.S. production of this product according to these specifications.

35. Certain Lapping Carrier Steel

HTSUS 7209.17.00, 7225.50.80, 7226.92.50

The product is used in the manufacture of special carriers for semi-conductor lapping. The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill requirements on precision flatness. Cold rolled hardened and tempered grades: Eberle 18, 18C (SAE 1095 modified alloyed steel), thickness range 0.002 - 0.010 inches, width up to max 24 inches. Very close thickness tolerances max. 0.0002 inches, unpolished, bright or blue polished surface Ra max. 0.25 micrometers, high precision flatness 0.1 - 0.3 percent of width, tensile strength UTS 253 - 319 ksi, slit edges.

36. High Precision Spring Steels

HTSUS 7226.99.00

This product is used for critical parts like dynamically loaded components, helical springs, etc. The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill requirements on microstructure, precision flatness, and edge finish. Cold rolled hardened and tempered strip steel, grades: Eberle 18, 18C (SAE 1095 modified alloyed steel); Eberle 13, 13C (SAE 1070/1075 modified alloyed steel). Width max 10 inches, thickness 0.002 - 0.01 inches, tensile strength UTS 246 - 304 ksi, high precision flatness 0.2 - 0.3 percent of the width, bright polished surface, Ra max 0.25 micrometer, edges deburred or rounded.

37. Feeler Gauge Steel

HTSUS 7211.90.00

This product is a cold-rolled hardened and tempered strip steel for measurement gauges and devices. Due to the very narrow width specification this product was previously excluded from antidumping and countervailing duty orders. The product is made for the end use specified and has no applications outside that use. Specially developed machinery and equipment are used to fulfill the requirements on very narrow thickness tolerances, precision flatness, surface and edge finish. To SAGA's knowledge, the product is not made in the United States in the thin sizes under 0.01 inches. Cold rolled hardened and tempered strip steel, grades Eberle 18, 18C (SAE 1095 modified alloyed steel), thickness range 0.001 - 0.045 inches, thickness tolerances T2 - T4 international standard, maximum width 0.4975 inches, polished surface, tensile strength UTS 246 - 304 ksi, edges deburred or rounded.

38. Reed Steel

HTSUS 7211.90.00

This product is used in the manufacture of filter webs, textile webs, and technical webs of the finest mesh standards, glass, steel wire, synthetics, carbonfiberwebs, carrier lattices for microelectronic components. The products is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill requirements on straightness, accurate width tolerances and precision edge finish. Due to the very narrow width specification this product was previously excluded from antidumping and countervailing duty orders. Specification is cold rolled hardened and tempered strip steel grades Eberle 18, 18C (SAE 1095 modified alloyed steel), thickness range 0.0008 - 0.04 inches, width range 0.276 - 0.472 inches, with narrow tolerances +/- 0.00157 - 0.00236 inches, tensile strength UTS 232-319 ksi, bright polished surface Rmax 1.5 - 3.0 micrometers, high precision straightness max. deviation 0.02in/3ft, flatness deviation 0.1 - 0.3 percent of the width, deburred or extra smooth rounded edges.

39. Bonderband

HTSUS 7226.99.00.00 and 7212.50.00.00

Band, phosphated on one side only, used in production of needle bearings. The band, phosphated on one side only, provides numerous advantages to producers of needle bearings. To SAGA's knowledge, this product is not made in the United States. Qualities MRS 4/43; C15M; 16MnCr5M. Phosphated and soaped surface; extremely low stretch limits and toughness through special heat treatment. The technological property "band phosphated on one side only" is inclusive to and important to the product description. The domestic industry does not identify and U.S. producers and states that if the product description requires that the steel be band phosphated on one side only, they are not capable of producing the product.

SAGA is not aware of any domestic objection to this product.

40. Blank band

HTSUS 7226.92.80.50

This product is used in the automobile industry for the production of a specialty product for motor controls; While the domestic industry claims that Blair produces the three grades 16MnCr5, 16MnCr5M, and 16MnCr5M2, the special technological property of this product is not the grades but the fact that this band is finally oscillated coiled like spools in a very large dimension of cross-section. Rochling is able to weld and oscillate band with cross section up to 0.3 square inches. The products exported to the U.S. are in the dimension 1.57 by 0.12 = 0.188 square inches and 1.77 by 0.1 = 0.177 square inches. Several individual rings are welded together and are delivered as a continuous band on a spool. Delivery of the required dimensions on spools are only possible with a spooling facility. There is no spooling facility in the United States to do the necessary width dimensions. Special machinery for welding and oscillated coiling are required.

41. Product 1075 T5 Tol. And better, 24.5 inch width

HTSUS 7225.50.80.

This product is used in the production of special parts (precision stamping) for the automotive industry and requires exact dimension.. To SAGA's knowledge, there is no U.S. production in these widths and no substitute products. This product is a cold rolled strip steel for strip hardening with extremely tight tolerances in widths (for instance: cold rolled strip AISI 1075 in thickness 0.0042 inches) with tolerances +/- .0004 inches. (T5 = based on the international recognized tolerance tables for precision strip products. Thickness range 0.2 - 3.0 mm (.008 to 0.12 inches). Production requires specially produced hot bands with very tight tolerances, measured cross and length rolling direction, state-of-the-art cold roll mill equipped with different specialized types of gauge control systems.

42. Product 1095 T5 Tol. And better 24.5 inch width

HTSUS 7225.50.80.

This product is used in the production of special parts (precision stamping) for the automotive industry and requires exact dimension.. To SAGA's knowledge, there is no U.S. production in these widths. This product is a cold rolled strip steel for strip hardening with extremely tight tolerances in widths (for instance: cold rolled strip AISI 1075 in thickness 0.0042 inches) with tolerances +/- .0004 inches. (T5 = based on the international recognized tolerance tables for precision strip products. Thickness range 0.2 - 3.0 mm (.008 to 0.12 inches). Production requires specially produced hot bands with very tight tolerances, measured cross and length rolling direction, state-of-the-art cold roll mill equipped with different specialized types of gauge control systems.

43. Certain cold-rolled hardened and tempered strip steel

HTSUS 7211.29.20.90, 7211.29.45.00, 7211.29.60.30; 7211.29.60.80, 7226.92.30.60

Examples of this product are colled rolled white and bluepolished strip for the automotive industry and colled rolled white polished strip steel for the tool industry. The hardening and tempering is a subsequent heat-treatment of the cold-rolled strip steel which is followed by an additional surface treatment as white and color polishing or grinding. Such finishes are mainly used in the tool and automobile industries. To SAGA's knowledge, there is limited production of hardened strip steel in the United States and the U.S. industry does not manufacture such steel with special finishes. Chemical Composition: Carbon – greater than 0.70 and less than 1.05 percent; silicon – content 0.15-0.35 percent; manganese – content 0.60-0.80 percent; cromium – content 0-0.50 percent; Thickness – 0.10 - 3mm; Width – 152.4 – 314 mm; Tensile strength – 1200-2000 Newton/mm2; Thickness-tolerances – according EN 10140. With special surface treatment after the cold-rolling and hardening and tempering process. As white polished, blue polished or ground.

44. Cold Rolled Steel Strip - SAE 1074 modified

HTSUS 7226.92.80.50

This product is used for the production of racing bearing shells/cages and other bearing shells/cages. Special Analysis: C = 0.70 - 0.80 percent, S = max. 0.005 percent, Al = 0.02 - 0.04 percent, Cr = 0.15 - 0.70 percent, Ni = up to 0.45 percent, Mo = up tp 0.12 percent. Extremely soft max. 75 RB, extremely bright surface (scratch and pit free) very smooth edge condition. Gauge .0236 - .044 inches, gauge total +/- .0008 inches, width 1.575 - 7.50 inches. Extremely good formability.

45. Cold Rolled Steel Strip - SAE 1065 modified

HTSUS 7226.92.80.50

The product has a modified analysis and extremely tight tolerances for various end-uses, rolled to special temper. Modified analysis: C = 0.63 - 0.70 percent, Mn = 0.60 - 1.05 percent, S = max 0.008 percent, Al = 0.02 - 0.05 percent, Cr = 0.15 - 0.40 percent. Consistency in quality is essential, the modified analysis is needed for the final product. Gauge .039 - .14 inches, Width .40 - 3.90 inches.

46. Cold Rolled Steel Strip - SAE 1045 modified

HTSUS 7225.50.80.85 and 7226.92.80.50

The product has a modified analysis - Zr microalloyed - and special rough surface for the production of high quality deep drawn toe caps. Modified analysis: C = 0.43 - 0.47 percent, Al = 0.02 - 0.06 percent, Zr = 0.06 - 0.11 percent. Specially developed quality, not available in the United States. Consistent surface conditions and mechanicals are extremely important. Guage: .06 - .07 inches. Width 5.31 - 25 inches.

47. Cold Rolled Steel Strip - SAE 1006 modified

HTSUS 7225.50.80.85, 7226.92.50.00, and 7226.92.80.50

This special grade was developed for the end use which is valves (in airconditioning systems). Modified analysis - Boron microalloyed - modified analysis: C = 0.025 - 0.045 percent, S = max 0.010 percent, Al = 0.015 - 0.040 percent, B = 0.001 - 0.004 percent. Extremely smooth surface condition and consistent mechanicals are essential. Guage 0.08 - 0.12 inches. Width: 2.00 - 2.76 inches AND Analysis: C = 0.02 - 0.05 percent, S = max. 0.010 percent, Al = 0.010 - 0.040 percent, B = 0.01 - 0.04 percent. Temper rerolled. End use: extremely deep drawn parts for which it is necessary to use this special clean material. Gauge .0015 - .028 inches. Width 22 - 25 inches.

48. Cold Rolled Steel Strip - SAE 1008 modified

HTSUS 7211.23.20.00

Modified analysis - Niobium and Titanium microalloyed (high strength/low alloy) for the production of synchronizer cores with close range of mechanicals, special matte finish and very close tolerances. Guage .07 - .12 inches. Width: 2.00 - 7.00 inches. Guage tol. +/- .0012 inches. Modified analysis: C = 0.03 - 0.05 percent, S = max. 0.005 percent, Al = 0.02 - 0.07 percent, Nb = 0.025 - 0.045 percent, Ti - max. 0.05 percent.

49. Crystal saws and surry blade steel for semiconductor industries

HTSUS 7211.90.00.

This products is for the semiconductor industry and is used in crystal cutting. The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill the requirements on precision straightness and edge finish. Cold rolled, hardened and tempered strip steel: grades Eberele 18, 18C (SAE 1095 modified alloyed steel) width 0.25 - 0.50 inches, thickness 0.001 - 0.02 inches, surface polished blue, Rmax 2.0 micormeters, high precision straightness 0.035 in/3ft without coil set, tensile strength UTS 283 - 297 ksi, edges rounded.

50. Steel for textile machine parts

HTSUS 7211.90.00

The products is made for the end use specified and has no applications outside that use. To SAGA's knowledge, the product is not made in the United States for the required quality standard. Specially developed machinery and devices are used to fulfill requirements on thickness tolerances, precision flatness and edge finish. Cold rolled hardened and tempered strip steel; grades Eberle 18, 18C (SAE 1095 modified alloyed steel), Eberle 13, 13C (SAE 1070/1075 modified alloyed steel), width max. 6 inches, thickness 0.004 - 0.04 inches, thickness tolerances T2 - T4 international standard; high precision flatness max. deviation 0.2 percent of the width, bright polished surface, Ra 0.25 micrometer, tensile strength UTS 282-304 ksi, edges deburred or rectangular.

51. Crepping Blade Steel

HTSUS 7211.90.00.

The product is used for industrial knives used in paper crepping machinery. The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill the requirements on precision flatness, straightness, and edge finish. Cold rolled hardened and tempered strip steel: grades Eberle 13, 13C (SAE 1070/1075 modified alloyed steel) , width range 1.5 - 5.0 inches, thickness 0.028 - 0.059 inches, high precision straightness max deviation 0.024 in/10ft and flatness max. deviation 0.2 percent of the width, polished or unpolished surface, Ra 0.25 micrometer, tensile strength UTS 203 ksi edges deburred or treated by special bevelling machinery.

52. Trimetal Strip Steel

HTSUS 7226.99.00.

The products is three strip materials, stainless strip steels and non iron materials are beam welded together) for critical resistor components in communication devices. The product is made for the end use specified and has no applications outside that use. Specially developed machinery and devices are used to fulfill requirements on precision welding, flatness, straightness and accurate edge finish. Width max. 2.0 inches, thickness 0.008 - 0.02 inches, high precision straightness and flatness, edges machined.

53 Band Knife Steel

HTSUS 7226.99.00

The product is used for industrial blades used in bread slicing. The product is made for the end use specified and has no applications outside that use. To SAGA's knowledge, the product is not made in the United States. Due to the very narrow width specification, this product was previously excluded from antidumping and countervailing duty. Specially developed machinery and devices are used to fulfill requirements on straightness and edge finish. Cold rolled hardened and tempered strip steel: grades Eberle 18, 18C (SAE 1095 modified alloyed steel); width range 0.25 - 0.4975 inches, thickness 0.012 - 0.02 inches, bright polished surface, straightness 0.25in/8ft, flatness 0.1 percent of the width, tensile strength UTS 274 ksi, edges rounded.

54. Flat Wire

HTSUS 7217.10.70 and 7211.29.20

A tailormade product produced to customer specifications. The product is used in the automotive industry by retaining ring and hose claim producers. Grade SAE 1074 alloyed. Annealed, skin passed as well as hardened and tempered, formed edges. Thickness 0.50 mm to 2.40 mm; width 3-25 mm. Requires latest heat treatment technology to provide material with a homogenous microstructure and optimized stamping and bending properties.

55. Cold Rolled Steel Strip to SAE 4130

HTSUS 7226.92.80.50

This product is used for the production of scrapers and similar hardware. Guage tol. +/- .0018 inches. Gauge .050 - .014 inches. Width up to 24 inches. Extremely good flatness is essential for the end use.

56. Cold Rolled Steel Strip for Production of Scrapers and Similar Hardware

HTSUS 7226.92.80.50

This product is required where good surface condition and consistency in hardness and mechanicals are essential.. Modified analysis: C = 0.74 - =.80 percent; S = max. 0.010 percent and Cr = 0.30 - 0.40 percent which is important for the consistency of the final product. Gauge: .0315 - .10 inches. Width: 1.30 - 9.50 inches.

57. 2% Nickel T5 Tolerances and ra less than 8 my

To SAGA's knowledge, there are no U.S. producers of this product.

SAGA is not aware of any domestic objection to this product.